

**ABSTRACT****A NOVEL HUMAN LEPTIN RECEPTOR GENE-RELATED PROTEIN**

The present invention provides a polynucleotide which identifies and encodes a novel human  
5 leptin receptor gene-related protein (LRGRP). The invention provides for genetically engineered  
expression vectors and host cells comprising the nucleic acid sequence encoding LRGRP. The  
invention also provides for the use of substantially purified LRGRP and its agonists, antagonists, or  
inhibitors in the commercial production of recombinant proteins and in pharmaceutical compositions  
for the treatment of diseases associated with the expression of LRGRP. Additionally, the invention  
10 provides for the use of antisense molecules to LRGRP in pharmaceutical compositions for treatment  
of diseases associated with the expression of LRGRP. The invention also describes diagnostic assays  
which utilize diagnostic compositions comprising the polynucleotide, fragments or the complement  
thereof, which hybridize with the genomic sequence or the transcript of polynucleotides encoding  
LRGRP or anti-LRGRP antibodies which specifically bind to LRGRP.